

Appl. No. 10/064,763
Amdt. dated October 25, 2004
Reply to Office action of July 27, 2004

REMARKS

5 The claims are not amended and are listed previously only for convenience to the examiner.

1. Rejection of claims 1-16 under 35 U.S.C. 103(a) as being unpatentable over Prior Art of Figs. 1 & 2 in view of Liang et al. (USP 5,604,757):

10 The applicant argues that the examiner's combination does not include all limitations of the claimed invention.

First, it should be noted that the RAM 18 in applicant's admitted prior art stores temporary data used by the program code 22 when the program code 22 is under
15 execution.

This is clear from paragraph [0005], which states

20 "a volatile random access memory (RAM) 18 for registering data, and a programmable non-volatile flash memory 20B with a program code 22 therein. The controller 16 manages the optical disc recorder 10 according to the program code 22 and registers the data that needs to be registered into the RAM 18."

25 This statement when taken fairly with the description of the prior art method (steps 100-114) teaches that the RAM 18 acts as temporary storage for the program 22. In no place does the admitted prior art teach or suggest storing the program code 22 itself into the RAM 18. The examiner's statement of "a RAM 18 for registering the program code" is in conflict with the applicant's admitted prior art.

Appl. No. 10/064,763
Amdt. dated October 25, 2004
Reply to Office action of July 27, 2004

In contrast, claim 1 recites

“registering the program code in a second memory”

5

meaning that the program code, originally in the first memory, is stored into the second memory. Similar limitations are recited in independent claims 9 and 15. The word “registering” is meant to express “copying” or “storing”, the former being selected over the latter two since the device involved is a memory. The reason for storing the program
10 code into the second memory (i.e. RAM 38), is that flash memory cannot be written to and read from at the same time. This disadvantage of flash memory is stated in paragraph [0020] of the prior art section, which states

15

“Although the optical disc recorder 10 is installed with the programmable flash memory 20B, the flash memory 20B cannot execute reading and writing functions simultaneously. That is, when the controller 16 reads the program code 22 stored in the programmable flash memory 20B, it cannot simultaneously write OPC data into the programmable flash memory 20B.”

20

Thus, overcoming this shortcoming of flash memory is one of the stated objectives of the invention. It should be noted that this shortcoming is also present in the examiner's combination, in which the program code would be executed from the flash memory (according to the admitted prior art) while, simultaneously, the system would attempt to write OPC data into the flash memory.

25

Second, since the program code 22 of the admitted prior art is never registered (i.e. stored or copied) into the RAM 18 (which the examiner has likened to the second memory), the combination also does not perform the claim 1 step of (Similar limitations are recited in independent claims 9 and 15.):

Appl. No. 10/064,763
Amdt. dated October 25, 2004
Reply to Office action of July 27, 2004

“controlling the functionalities of the optical disc recorder according to the program code registered in the second memory and then writing the OPC data of the optical disc to the first memory”

5

In summary, the method of the admitted prior art executes the program code stored in the flash memory and then stores OPC data into the ROM. If we follow the examiner's combination and store the OPC data into the flash memory (rather than the ROM), we still do not arrive at the invention since the necessary step of “registering the program code in a second memory [RAM]” is not taught or suggested by the cited art. However, paraphrasing claim 1, the invention provides the program code in a flash memory, registers (i.e. copies, stores) the program code into a RAM, executes the program code stored in the RAM, and then stores OPC data into the flash memory. Registering and executing of the program code in the RAM is necessary since the flash memory cannot be read from and written to simultaneously.

10
15

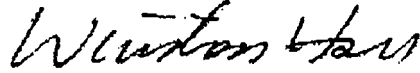
Since the applicant believes that the examiner has misconstrued or read too much into the admitted prior art, the claims should be patentable over the combination of cited art. Hence, reconsideration of claims 1-16 is requested in view of the above argument. Claims 2-8, 10-14, and 16 are dependent and should be allowed if claims 1, 9, and 15 are allowed.

20

Appl. No. 10/064,763
Amdt. dated October 25, 2004
Reply to Office action of July 27, 2004

Sincerely,

5



Date: OCT 26 2004

Winston Hsu, Patent Agent No. 41,526

P.O. BOX 506

Merrifield, VA 22116

10 U.S.A.

Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

(Please contact me by e-mail if you need a telephone communication and I
will return your call promptly.)

15